A.D. 1801 . . . . . N° 2522.

SPECIFICATION

OF

GEORGE STRATTON.

FIRE-PLACES AND APPARATUS FOR COOKING.

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Fire-places and Apparatus for Cooking.

STRATTON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, GEORGE STRATTON, of Blackfriars Road, in the Parish of S^{t} George's, Southwark, in the County of Surry, Ironmonger, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, by His Letters Patent under the Great Seal of Great Britain and Ireland, bearing date at Westminster, the Twenty-sixth day of June, in the forty-first year of His reign, give and grant unto me, the said George Stratton, His especial license, that I, the said George Stratton, during the term of years therein mentioned, should and lawfully might use, exercise, and vend, within England, Wales, and the Town of Berwick upon Tweed, my Invention in "IMPROVEMENTS IN MACHINES FOR COOKING AND FIRE-PLACES;" in which said Letters Patent there is contained a proviso obliging me, the said George Stratton, by an instrument in writing under my hand & seal, to cause a particular description of the nature of my said Invention, and in what manner the same is to be performed, to be enrolled in His Majesty's High Court of Chancery within one calendar month after the date of the said recited Letters Patent, as in and by the same, relation being thereunto had, may more fully and at large appear.

NOW KNOW YE, that I, the said George Stratton, in compliance with and performance of the said proviso, in the said in part recited Letters Patent contained, do by this instrument under my hand and seal, particularly describe and ascertain the nature of my said Inventions, and how the same are to be performed, by the explanations, Drawings, and references herein contained and set forth (that is to say) :—

Stratton's Improvements in Machines for Cooking and Fire-places.

Whereas in the most general method of constructing the fire-places of coppers or boilers, there is a very considerable quantity of heat which escapes under the bottom of the copper by causing the heat to expand round its sides, by which means the most considerable portion of heat is lost, and the sides of the copper presently become injured by the action of the fire, while the bottom which is the better able to bear it remains totally unimpaired. In order to remedy this inconvenience, I construct and erect the fire-places of coppers in the following manner:—Figure 1, A, is the construction of a dish to contain the fire, of the most convenient shape, to which is annexed the feeding pipe B, the front of which is made to project sufficiently to be about even with the front of the brickwork. The dish and feeding pipe may be cast or made in one piece or wrought together in a workmanlike method. Figure 2 is a perspective view of the bed and stops; C, C, the bed; D, D, D, D, the stops, the two front stops being shewn broken off for the more perfect inspection; in the centre of the bed is seen the dish A, sunk within it, but resting on the bed by its rim. The bed and stops may be made in one or more pieces, as occasion or size of boiler may require. Figure 3, E shews the section of a copper resting on the bed and stops, with its bottom directly over its portion of the dish, and also exhibits the erection of the brickwork for its support, the space being left for chimney as usual; F, the door of the feeding pipe; G, the door of the ash hole; H, H, are regulaters in the doors of both, which admit air to the fire in proportion as they are more or less open. The dish, feeding pipe, bed, and stops may be made of iron, brick, stone, or any eligible composition. Figure 4 shews the copper completely erected.

The advantages of this method of constructing the fire-places for boilers, &c. are at once obvious, the heat arising immediately out of the dish under the copper, &c., and spreading itself in every direction of the bed betwixt the stops on all parts of the boiler or copper, consequently gives it the liberty of acting with its greatest force. By this method any quantity of liquor according to the size of the boiler or copper may be heated in a very small portion of time to those in general use; and, consequently, with only a proportion of fuel to the time of heating, which would have but little effective heat on the copper by the general method of construction of other fire-places.

The second part of my Inventions consists in very material improvements in the construction of the smoke-jack, by which improvements all filth and soot intirely excluded from the interior parts, and a constant supply of oil is kept within it without any trouble or inconvenience whatsoever. See Figure 5. A is the fly of the smoke jack. B is a worm which rests on a step *a*, and turns in a pivot or top carriage *b*, which gives motion to the main wheel C and

FIG. 1.

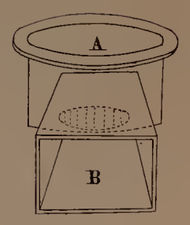


FIG. 2.

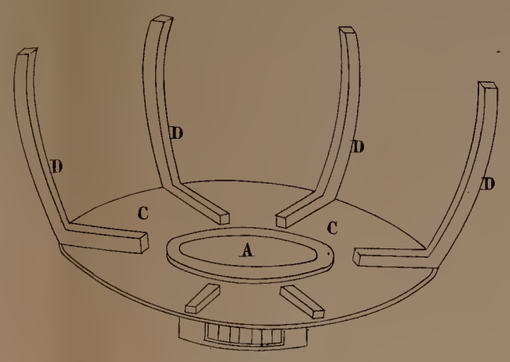


FIG. 3.

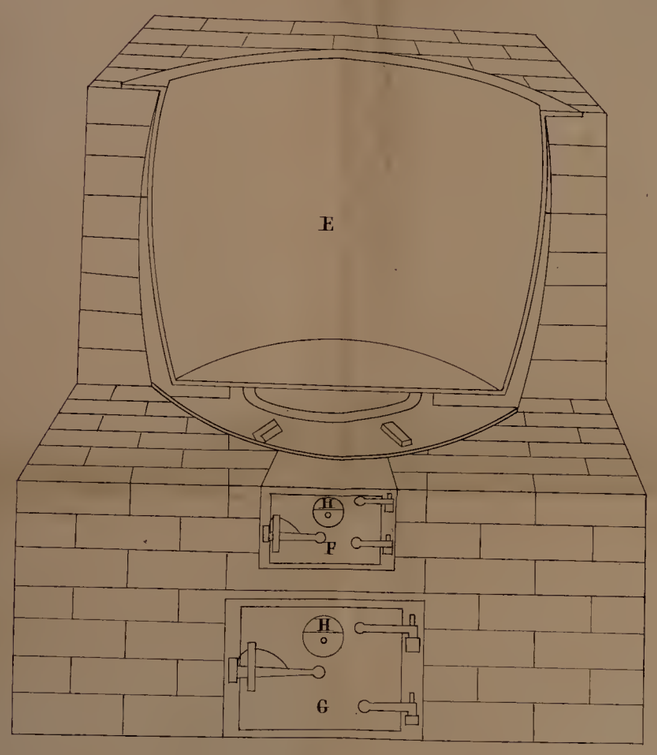


FIG. 4.

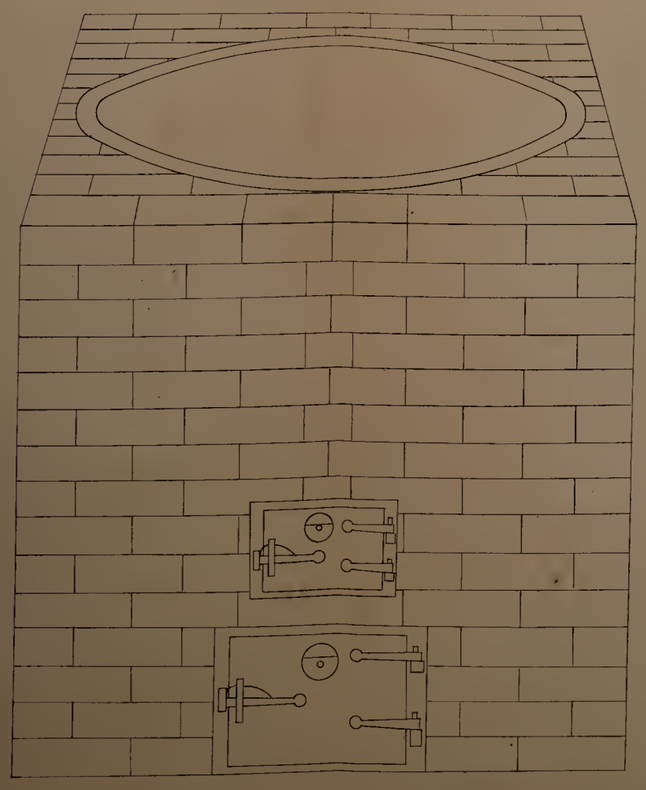


FIG. 5.

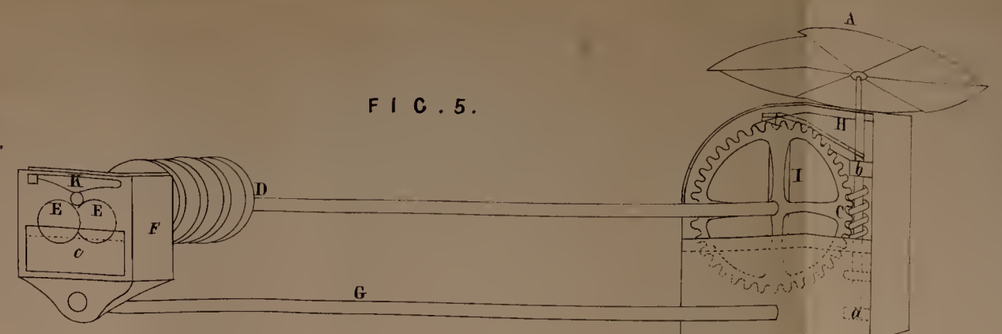


FIG. 6.

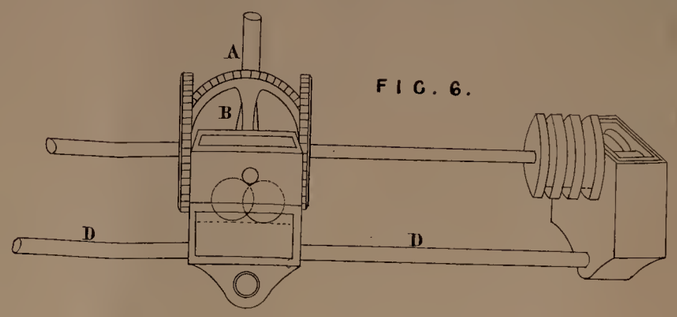


FIG. 7.

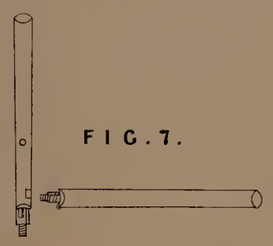


FIG. 8.

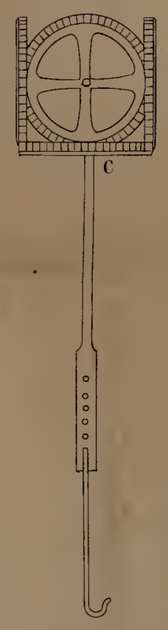
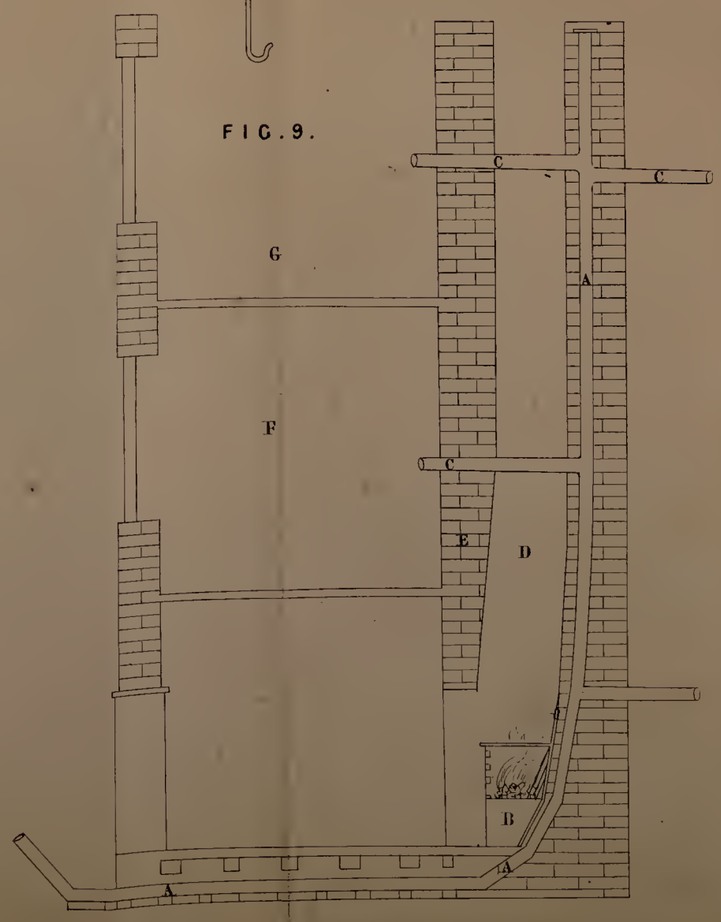


FIG. 9.



The enrolled drawing is colored

Malby & Sons Lith.

spindle and pulleys D, which turn on two rollers or small friction wheels E, E, inclosed in a friction box in the oil supplyer. F is the oil supplyer, being a cast iron or metal box, with a square portion of it in front left vacant to fill up with a plate of glass C, to shew the height or quantity and quality of the oil within it. G is a strong tube of iron or other metal, each end being made firm to each box, consequently, as the oil supplyer is more or less supplied with oil it will furnish the main wheel box with an equal height of oil as is seen in the oil supplyer thro' the glass. H is a small spring fixed upon the top of the standard I, the other end resting on the top carriage *b*, which is supplied with oil by the main wheel when turned, leaving a portion on the spring which immediately runs down the spring to the worm in the top carriage. K is a latch for the convenience of shifting the pulleys and spindle when not in use for roasting. The whole of the main wheel box is then completely closed, leaving a small collar for the spindle to work in, by which method every possible filth or soot is entirely excluded from the interior work of the jack; and consequently a constant supply of pure oil is kept at once in every part. Figure 6 shews the construction of a double jack upon the same principle: A, the spindle as coming directly thro' the centre of the chimney into the friction box, on which is fixed a toothed or pinion wheel B, which works in a horizontal tooth wheel C, as seen in Figure 8, which horizontal wheel turns two perpendicular tooth or pinion wheels, the one opposite the other, which are fixed upon and turn the spindle and pullies, which turn on rollers in a friction box fixed in the oil supplyer, as before described. D, D, the tubes connected from the centre box to the two side boxes. Figure 7 is to shew a method of connection of the cross tubes one within each other for the regular supply of oil in each box at the same time, or any other method of the like nature which I adopt as most convenient. Figure 8 is merely to shew the method of roasting by the horizontal wheel at the same time the spindle wheels are going round or not, as occasion may require. The third part of my Invention applies to the heating of upper and other rooms in houses from the kitchen range or other fire-place or chimnies by means of pure air conveying itself thro' a tube or aperture, and receiving heat while passing the back or sides of the chimney. Figure 9 is the section of a chimney with part of a house to shew its operation; A, A, A, the tube or aperture commencing on the outside of the house and continuing its course underneath the floor or other convenient part till it arrives to the back or side of the chimnies or fire-places, or the air may be conveyed above the fire from the back wall, &c. as at . B is a section of a kitchen grate or range, the tube A running directly in close connexion to the back of the range or grate, and rising perpendicular up the back wall of the

chimney till it arrives at nearly the top, where it is then closed from the main tube A; branches of tubes C, C, C, are brought forward or spread in different directions into any convenient part of every room on each floor; the end of each branch is shut with a regulator, by opening which any quantity of heated air may be let into the room with pleasure. The commencement of the tube in the open air (or other convenient place) may be left open, which will always receive a current of fresh air, as the heated air is let into the rooms. D, the chimney; E, the breast-work of the chimney; F, parlour or dining room; G, upper room or bed chamber. These tubes are wrought from any material capable of being constructed and converted to such use.

In witness whereof, I, the said George Stratton, have hereunto set my hand and seal, the Twenty-fifth day of July, in the year of our Lord One thousand eight hundred and one.

GEORGE STRATTON. (L.S.)

AND BE IT REMEMBERED, that on the Twenty-fifth day of July, in the year of our Lord 1801, the aforesaid George Stratton came before our Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in the form above written. And also the Specification aforesaid was stampt according to the tenor of the Statutes made for that purpose.

Inrolled the Twenty-fifth day of July, in the year of our Lord One thousand eight hundred and one.

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1854.